Kathleen Hartnett White, *Chairman*R. B. "Ralph" Marquez, *Commissioner*Larry R. Soward, *Commissioner*Margaret Hoffman, *Executive Director* 



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 5, 2004

#### Dear Sir or Madam:

As you may be aware, Texas continues to struggle with air quality problems related to ground-level ozone in areas throughout the state. In response to this challenge, many local cities, counties, school districts, utility districts, and other political subdivisions have been voluntarily implementing programs to reduce energy consumption at the local level. The Texas Commission on Environmental Quality (TCEQ) is working with the Environmental Protection Agency to ensure that the air quality benefits attributed to your local energy efficiency and renewable energy efforts are taken into account in the State Implementation Plan (SIP), Texas' plan for complying with the Federal Clean Air Act.

A crucial first step in the process is the gathering of information about your energy efficiency and renewable energy projects and initiatives. In other words, we want to hear all about your efforts and achievements, plans, and progress in saving energy at the local level. To that end, the TCEQ has produced a Guide entitled "Incorporating Energy Efficiency/Renewable Energy (EE/RE) Projects into the SIP - A Guide for Local Entities". This Guide describes your role in this process, the roles of the various players, and the types of projects we would like to hear about.

For example, if you completed any of the following projects since 2001, or plan to implement these types of projects in the near future, we would like to hear about them:

- Building Energy Codes (New Construction & Rating Programs)
- State-mandated IECC/IRC Building Energy Codes
- o Locally-mandated "Green" Building Energy Codes (Beyond State Minimum)
- Voluntary Local "Green" Building Energy Standards (Beyond State Minimum)
- Special Project New Buildings (LEED-certified or comparable)
  - Local Distributed Generation Renewable Energy Projects
- o Solar Photo-Voltaic (PV) Installations
- Solar Thermal Installations
- o Zero-Regulated-Emissions Distributed Generation Installations (e.g. Fuel Cells)
- Renewable Energy Purchases from Remote Locations
- Wind Electric Power Purchases
- Hydroelectric Power Purchases
- o Solar Photovoltaic Power Purchases
- Local Government Utility Infrastructure-Related Projects
- Water and Wastewater Energy-Related Improvements

- o Street Lighting and Traffic Signal Lighting Improvements
- Other large-scale Community Based Energy Efficiency Projects
- Voluntary Facility Retrofits and Efficient Operations
- Energy Conservation Building Retrofits (including building HVAC, appliance upgrades, lighting retrofits and cool roofs)
- o Building Commissioning Projects

The TCEQ has been working closely with the State Energy Conservation Office (SECO) and Texas A&M's Energy Systems Lab (ESL) to revise SECO's reporting system to allow you to provide details about your projects on a web-based reporting form, in order to fully account for the air quality benefits of your energy saving initiatives. The SECO plans to unveil the revised reporting system on January 30, 2004. Please log on to <a href="https://www3.cpa.state.tx.us/TEP\_Reporting.nsf/Home?OpenForm">https://www3.cpa.state.tx.us/TEP\_Reporting.nsf/Home?OpenForm</a> at that time to begin reporting your projects to the SECO, and hence, the TCEQ. At TCEQ's suggestion, ESL stands ready to provide local governments with technical assistance to adequately document EE/RE projects reported for credit in local SIPs.

The TCEQ and SECO would like to extend an invitation to all interested parties to attend one of three workshops being held to provide information about energy efficiency and Senate Bill 5:

- Longview, Texas February 10, 2004
- Arlington, Texas February 18, 2004
- Houston, Texas February 20, 2004

As part of these workshops, the TCEQ, SECO, and ESL will be providing an overview of this Guide, walking through the revised SECO reporting system, and answering your questions about data collection and reporting. Registration is free and workshops last from 8:00 am to 4:30 pm. Additional information and registration details are available at: <a href="http://www.seco.cpa.state.tx.us/sb5compliance.htm">http://www.seco.cpa.state.tx.us/sb5compliance.htm</a>.

We appreciate the initiative you have taken, and will take, towards reducing energy consumption and look forward to hearing about your efforts!

Sincerely,

Margaret Hoffman, Executive Director

Texas Commission on Environmental Quality

# Incorporating Energy Efficiency/Renewable Energy (EE/RE) Projects into the SIP

A Guide for Local Entities



Last Updated February 6, 2004

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#### 1. Who should use this Guide?

This Guide is aimed at political subdivisions<sup>1</sup> required to report to the State Energy Conservation Office (SECO) under Section 388.005 of SB5 (77<sup>th</sup> Legislative Session), who are undertaking energy efficiency or renewable energy (EE/RE) projects such as

- Building Energy Codes (New Construction & Retrofits),
- Local Distributed Generation Renewable Energy Projects,
- Renewable Energy Purchases from Remote Locations,
- Utility Infrastructure-Related Projects, and
- Voluntary Above-Code Rated Buildings,

and are interested in reporting energy savings from these projects for inclusion in their local State Implementation Plan (SIP).

However, any entity interested in voluntarily reporting their energy savings to the Texas Commission on Environmental Quality (TCEQ) for inclusion in a future revision to the SIP may find this document useful. The TCEQ will work with SECO and Texas A&M's Energy Systems Laboratory (ESL) to develop a voluntary reporting system and guidance document for entities not required to report to SECO but who choose to report voluntarily. Some of these entities may include:

- Federal government
- State government
- Private entities
- Political subdivisions not located in the 41 affected counties

The TCEQ plans to have a voluntary reporting system in place for these additional entities prior to summer 2004.

<sup>&</sup>lt;sup>1</sup>This Guide applies to all areas of Texas with the exception of the 8-county Houston/Galveston (HGA) nonattainment area, which is currently under a mass cap and trade program. While we encourage political subdivisions in the HGA area to report their projects as outlined in this Guide, HGA is a unique case with outstanding issues that need to be resolved.

### 2. What is the purpose of this Guide?

The aim of this Guide is to provide political subdivisions with answers to some basic questions about their role in the process of including emission reductions from EE/RE projects in the SIP. This Guide will cover topics such as:

- What is the process for including emission reductions from EE/RE projects in the SIP?
- What types of technologies and projects generate reductions that may be included in the SIP?
- How can I assist by reporting information accurately to SECO?

# 3. What is the history behind including EE/RE in the Texas SIP?

On December 13, 2002, the TCEQ revised the Houston-Galveston (HGA) SIP to include a protocol for implementing and calculating reductions from energy savings resulting from Senate Bill 5 (SB5) and Senate Bill 7 (SB7) measures. This revision was followed by a revision to the Dallas-Fort Worth (DFW) SIP on March 5, 2003, which included an estimate of NOx reductions associated with SB5 and SB7.

However, since information was not available at the time concerning the expected energy savings by each political subdivision, this method relied on assumptions about the level of commitment by political subdivisions to implement the 5% per year reduction in the facilities. SB 5 requires all local political subdivisions to implement all the energy efficiency measures that are cost effective whereby "cost-effective" is defined by the cost of the energy efficiency project being less than the utility savings realized by the project. Since SB5 only requires that a target of 5% reduction in energy usage per year be set, it remains up to individual political subdivisions to adopt ordinances, resolutions, procedures or plans to demonstrate their commitment to achieving the target. In both SIP revisions, the TCEQ acknowledged this limitation and committed to refining the tools and data.

To address this limitation, the TCEQ has contracted with ESL to develop a comprehensive calculator to determine emissions reductions from various EE/RE programs. Upon completion, this calculator will be capable of calculating energy savings and associated emissions reductions in pollutants from:

- Meeting or exceeding IECC 2000 building energy codes, and its amendments as of May 2001, for single, multi-family, commercial, and industrial buildings (industrial processes excluded);
- Implementing utility infrastructure-related projects, such as replacing pumps, LED-traffic signalization, or other infrastructure projects that reduce energy consumption;
- Purchasing renewable energy from afar or installing local renewable energy systems.

The ultimate goals of the calculator development project are (1) to allow calculation of emissions reductions to be included in the SIP, and (2) to enable hour-by-hour SIP episodic modeling of power plant emissions.

However, the timing of the development of this model does not correspond with the need in nonattainment and near nonattainment areas to develop Early Action Compacts (EACs) and revisions to the SIP. Thus, the TCEQ has developed an interim process to include emissions reductions from EE/RE projects into the SIP. This Guide explains this process and your role.

# 4. What is the process for including emission reductions from EE/RE in the SIP?

The basic steps for determining emissions reductions toward the SIP from EE/RE projects are:

- 1. Identify and collect information on eligible EE/RE projects
- 2. Estimate the energy savings associated with those projects
- 3. Calculate the emissions reductions associated with those energy savings
- 4. Demonstrate to the EPA that the reductions meet EPA criteria
- 5. Monitor/report actual savings/emission reductions post-project

Many players contribute to making this process happen. The table below explains each entity's role:

Step	Entity Involved	Role
1	ESL/TCEQ	Provide guidance to SECO on the types of data required to calculate emissions reductions from EE/RE.
	Political Subdivisions	<ul> <li>Identify completed or proposed EE/RE programs and projects.</li> <li>Estimate projected energy savings (may need assistance from consultants, suppliers, or ESL).</li> <li>Collect monthly billing information, manufacturer estimates, project characteristics, renewable energy provider meter measurements, and possibly energy savings calculations (although not necessary).</li> <li>Report plans to SECO.</li> </ul>
	SECO	<ul> <li>Provide assistance to political subdivisions on reporting.</li> <li>Collect reported data.</li> <li>Submit reported data to TCEQ.</li> </ul>
	TCEQ	Submit data to ESL for Step 2.
2	ESL	Calculate, based on data from political subdivisions, energy savings associated with eligible EE/RE projects.
3	ESL	<ul> <li>Calculate, based on energy savings calculated in Step 2, emission reductions associated with those energy savings.</li> <li>Submit results to TCEQ.</li> </ul>
4	TCEQ	<ul> <li>Collect information from all sources.</li> <li>Include results from Steps 2 &amp; 3 into emissions inventory and photochemical model.</li> <li>Determine anticipated reductions and submit as part of a SIP revision.</li> <li>Work with EPA throughout process to ensure that reductions meet EPA criteria for the SIP.</li> </ul>

5	Political Subdivisions	Collect/report actual (post-project) energy savings to SECO.	
	SECO	•	Submit post-project reported data to TCEQ.
	TCEQ/ESL	•	Work with EPA to refine modeling based on actual energy savings and actual emissions.

As you can see, the key role of the political subdivision is in gathering and reporting the necessary data to facilitate the process.

#### Box 1: What is EPA's criteria for inclusion in a SIP?

In order to be included in a SIP, emissions reductions must meet certain EPA criteria. They must be:

<u>Quantifiable</u>: The emission reductions should be quantifiable and include procedures to evaluate and verify over time the level of emission reductions actually achieved.

<u>Surplus</u>: The emission reductions cannot be required or assumed by an existing SIP or permit, nor otherwise relied upon or required to meet any of the following:

- A technology based requirement of the Act, including, but not necessarily limited to, RACT, BACT, LAER, BART, NSPS limits, or NESHAPS limits.
- Conformity-based requirements for example, reductions needed to demonstrate conformity.
- Emission reductions used or needed for offset or netting purposes.
- Other adopted State air quality programs not in the applicable SIP.
- Federal rules that reduce criteria pollutants (or their precursors) such as rules for reducing VOCs promulgated under section 183 of the CAA.

<u>Enforceable</u>: The emission reductions must be enforceable. The state would make an enforceable commitment to monitor, assess and report on the emission reductions resulting from the voluntary measures and to remedy any shortfalls from forecasted emission reductions in a timely manner. Since the TCEQ is ultimately responsible for the emission reductions, the TCEQ will need to establish sufficient evidence of enforceability prior to including reductions from EE/RE projects in the SIP.

<u>Permanent</u>: Emission reductions produced by the EE/RE measure must continue at least for as long as the time period in which they are used by applicable SIP demonstrations. The EE/RE measure need not continue forever to generate permanent emissions reductions, but must specify an appropriate period of implementation in the SIP.

Source: http://www.epa.gov/ttn/oarpg/t1/memoranda/vmpol601.pdf

# 5. What types of EE/RE projects may be eligible for inclusion in the SIP?

The following are examples of EE/RE projects that the TCEQ currently accepts for potential inclusion in the SIP.

- Building Energy Codes (New Construction & Retrofits)
  - State-mandated IECC Building Energy Codes
  - Locally-mandated "Green" Building Energy Codes (Beyond State Minimum)
  - Voluntary Local "Green" Building Energy Standards (Beyond State Minimum)
- Local Distributed Generation Renewable Energy Projects
  - Solar Photo-Voltaic (PV) Installations
  - Solar Thermal Installations
  - Zero-Regulated-Emissions Distributed Generation Installations (e.g. Fuel Cells)
- Renewable Energy Purchases from Remote Locations
  - Wind Electric Power Purchases
- Utility Infrastructure-Related Projects
  - Water and Wastewater Energy-Related Improvements
  - Street Lighting and Traffic Signal Lighting Improvements
- Voluntary Above-Code Rated Buildings
  - Energy Conservation Building Retrofits (including building HVAC, appliance upgrades, and cool roofs)
  - Special Project New Buildings (LEED-certified or comparable)
  - Building Commissioning Projects

These project types have been chosen because they have the potential to meet EPA's criteria for inclusion of a strategy's emissions reductions into the SIP (see Box 1 for explanation). We encourage political subdivisions to include in their reports information about any projects which they have completed or are contemplating which are not on this list, but which you believe are quantifiable, surplus, enforceable, and permanent. The TCEQ will use your submitted information to determine whether this list should be expanded.

# 6. How can I assist by reporting information accurately to SECO?

As noted in Section 4, political subdivisions play a crucial role in the process of determining the amount of emissions reductions from energy savings that may be included in the SIP. After initial estimates, your role involves keeping records, gathering key data, reporting projects and initiatives thoroughly and in a timely manner, tracking and reporting actual post-project results, and submitting pertinent information to assist the TCEQ in demonstrating that the reductions meet EPA criteria. Keep in mind that the more thorough the data we receive from you, the better we will be able to credit your energy savings in the SIP.

Section 388.005 of SB5 (77th Legislative Session) requires each political subdivision to implement all the energy efficiency measures that are cost effective whereby "cost effective" is defined by the cost of the energy efficiency project being less that the utility savings realized by the project, and to establish a goal to reduce electricity consumption in its facilities by 5% each year for 5 years and to report annually to SECO regarding your efforts and progress. Section 388.006 requires SECO to annually provide TCEQ with an evaluation of the effectiveness of state and political subdivision EE/RE programs.

The TCEQ will use this reporting requirement as the foundation for the data collection effort towards emissions reductions from energy conservation efforts at the political subdivision level. This Guide should therefore be viewed as a companion to the recently revised SECO reporting forms.

Some of the information you are asked to provide in the current reporting period is new. Previously, SECO requested only information about total energy usage and gross facility square footage. The TCEQ, SECO, and ESL have improved SECO's reporting system to collect the information necessary to more accurately include emissions reductions associated with energy savings from your local EE/RE projects into the SIP.

Users logging into SECO's reporting website after January 30, 2004 have the option of either reporting basic information (unchanged from previous year) or reporting more detailed project information. For more information, please visit <a href="https://www3.cpa.state.tx.us/TEP\_Reporting.nsf/Home?OpenForm">https://www3.cpa.state.tx.us/TEP\_Reporting.nsf/Home?OpenForm</a>.

Some new information we will be looking for as of January 30, 2004 include:

• Baseline energy usage data

- Estimate of energy savings potential which you are committed to achieve
- EE/RE project details
- Evidence of enforceability
- Documentation of potential double-counting
- Post-project results

#### Baseline energy usage data

Political subdivisions are now able to report their baseline energy usage data on a monthly level to the SECO. Monthly data will allow the ESL to better determine your peak usage during the critical summer months. More accurate data will reduce uncertainty and allow greater reductions to be counted towards an area's SIP<sup>2</sup>.

#### EE/RE project details

Political subdivisions are now able to provide details EE/RE projects for inclusion in the SIP for your region on the SECO web-base reporting form. Different forms will be available for the each project type. Some information to gather include:

- physical address of project location
- monthly meter reading reports
- product specifications (i.e. manufacturer, product number, efficiency rating)

#### Evidence of enforceability

For some of the EE/RE projects you report, you may need to submit evidence of enforceability. This documentation is necessary for the TCEQ to establish some confidence that this measure will be implemented and the energy savings achieved. As Box 1 explains, this is a basic criteria of EPA's for inclusion of reductions in the SIP. Although the form of evidence of enforceability depends on the nature of the project, the table below lists some acceptable forms of evidence:

<sup>&</sup>lt;sup>2</sup>The EPA discounts the allowable emissions reductions depending on the resolution of the data. The more detailed the data, the more accurate the estimates, and therefore, the less uncertainty that the reductions will be achieved.

Type of Project	Possible Forms of Evidence of Enforceability
SB5 Annual Energy Use Reduction	<ul> <li>Resolution adopting a specific target reduction in electric consumption (see Appendices B and C for sample resolutions)</li> <li>Plan for achieving the target and local resolution adopting said plan</li> <li>Performance contract incorporating a guaranteed minimum reduction</li> </ul>
IECC 2001 Building Energy Codes	<ul> <li>Budget statement showing the amount budgeted for code enforcement per annum</li> <li>Records from previous years demonstrating rate of compliance (if available)</li> </ul>
Locally Mandated "Green" Building Energy Codes Beyond State Minimum	<ul> <li>Local ordinance/resolution mandating code</li> <li>Budget statement showing the amount budgeted for code enforcement per annum</li> <li>Records from previous years demonstrating rate of compliance (if available)</li> </ul>
Voluntary Local "Green" Building Energy Performance Standards Beyond State Minimum	<ul> <li>Local ordinance/resolution adopting program</li> <li>Records from previous years demonstrating rate of voluntary compliance (if available)</li> </ul>
Local Distributed Generation Renewable Energy, Utility Infrastructure, and Voluntary Above-Code Building Projects	<ul> <li>Detailed project implementation plan approved by local authority</li> <li>Local ordinance/resolution adopting program</li> </ul>
Renewable Energy Purchases from Remote Locations	Contractual/purchase agreement between local entity and energy provider/manufacturer

Any one of these forms of evidence may be considered. It will be up to you determine the best form of evidence available. If none of these forms of evidence are available, you may choose to enter into agreement with the TCEQ as evidence of enforceability. A sample memorandum of agreement (MOA) is included in Appendix A of this Guide.

The SECO web reporting form will ask you to describe your supporting evidence for each project type. You may be asked to submit documentation supporting your evidence of enforceability in hard copy to the TCEQ.

#### Documentation of potential double-counting

Double-counting occurs when an emission reduction is included in the SIP in more than one instance under different categories. This is an important issue which needs to be addressed. As noted in Box 1, the EPA only allows reductions in the SIP if they are surplus. The TCEQ will work closely with the ESL and EPA to ensure that double-counting does not occur.

#### Post-project results

As part of future reporting, SECO will be requesting follow-up data to be submitted for projects after they have been completed. This information is required in order for the TCEQ and EPA to verify that projects are achieving the results anticipated.

#### **Appendix A: Sample MOA**

# MEMORANDUM OF AGREEMENT ("MEMORANDUM")

#### I. Parties

This Memorandum is entered into between the Texas Commission on Environmental Quality ("TCEQ") and the [name of political subdivision], collectively, the "Parties".

- 1. The TCEQ is has authority under § 5.229 of the Texas Water Code and § 382.033 of the Texas Health and Safety Code to enter into this agreement.
- 2. The [name of political subdivision] has authority under [section] of [code] to enter into this agreement.

#### II. Intent and Purpose

The intent of this Memorandum is to memorialize the agreement between the [name of political subdivision], [county name] county and the TCEQ to implement the following programs aimed at the reduction of energy consumption within the [name of affected area]:

- 1. [energy efficiency program #1 title] [program #1 description]
- 2. [energy efficiency program #2 title] [program #2 description]
- 3. [energy efficiency program #3 title] [program #3 description]
- 4. [energy efficiency program #4 title] [program #4 description]

The Parties enter into this Memorandum for the purpose of incorporating the energy savings, and associated reductions in emissions of nitrogen oxides (NOx), resulting from the above-referenced programs into the Texas State Implementation Plan ("SIP").

#### III. Definitions

As used in this Memorandum, the following terms have the meanings given below:

- 1. "EPA" shall mean U.S. Environmental Protection Agency.
- 2. "TCEQ" shall mean Texas Commission on Environmental Quality.
- 3. "tpd" shall mean tons per day.
- 4. "SIP" shall refer to the Texas State Implementation Plan.

#### IV. Background

- 1. Under Section 110 of the Federal Clean Air Act, 42 U.S.C. § 7410, each state that has a non-attainment area must submit a SIP to the EPA demonstrating strategies to come into compliance with the National Ambient Air Quality Standards ("NAAQS").
- 2. Section 110 of the Federal Clean Air Act, 42 U.S.C. § 7410 also requires Texas to submit to the EPA for approval any SIP revisions and to demonstrate that such SIP revisions will not interfere with

any applicable requirement concerning attainment and reasonable further progress or any other applicable requirement of the FCAA, as required by §110(l) of the FCAA.

- 3. On February 6, 2004, the TCEQ issued a document entitled "Incorporating Energy Efficiency/Renewable Energy (EE/RE) Projects into the SIP: A Guide for Local Entities", which provides guidance on how political subdivisions can assist the TCEQ in taking credit for emissions reductions from energy efficiency measures implemented at the political subdivision level. This guidance document requires political subdivisions to assist in demonstrating that emissions reductions from energy savings are enforceable by submitting evidence of enforceability. Evidence of enforceability is documentation demonstrating to the TCEQ that energy efficiency and renewable energy programs initiated at the local level are legally enforceable by the initiating local authority and that adequate effort is made at the local level to enforce said programs. A Memorandum of Agreement between the political subdivision and TCEQ is considered an acceptable form of evidence of enforceability. Evidence of enforceability is required to ensure that emissions reductions included in a SIP are enforceable.
- 4. According to the TCEQ guidance referenced in section IV(3), energy efficiency, renewable energy and no-emission distributed generation strategies that may be considered for inclusion as SIP measures include, but are not limited to:
  - a. State-mandated IECC Building Energy Codes
  - b. Mandatory Local Building Energy Codes Beyond State Standards
  - c. Voluntary Local Building Energy Codes Beyond State Standards
  - d. Local Distributed Generation Solar Photo-Voltaic (PV) Installations
  - e. Local Distributed Generation Solar Thermal Installations
  - f. Zero-Regulated-Emissions Distributed Generation Installations (e.g. Fuel Cells)
  - g. Wind Electric Power Purchases from Remote Locations
  - h. Utility Water and Wastewater Energy-Related Improvements
  - i. Street Lighting and Traffic Signal Lighting Improvements
  - j. Voluntary Above-Code Energy Conservation Building Retrofits (including building HVAC, appliance upgrades, and cool roofs)
  - k. Voluntary Above-Code Special Project New Buildings (LEED-certified or comparable)
  - 1. Building Commissioning Projects
- 5. The TCEQ and the [name of political subdivision] acknowledge that the [name of political subdivision] has entered into this Memorandum voluntarily. In order to safeguard the air resources of the State of Texas, the [name of political subdivision] agrees to comply with the terms of this Memorandum of Agreement.
- 6. The [name of political subdivision] understands and agrees that the commitments in this agreement become federally enforceable by the EPA and citizens, upon approval of this agreement into the SIP.

#### V. Obligations of Parties

- (A) The [name of political subdivision] agrees as follows:
- 1. In accordance with the terms of this Memorandum, the [name of political subdivision] agrees

to implement the following energy efficiency/renewable energy programs by [date of implementation]:

- a. [energy efficiency program #1 title] [program #1 description]
- b. [energy efficiency program #2 title] [program #2 description]
- c. [energy efficiency program #3 title] [program #3 description]
- d. [energy efficiency program #4 title] [program #4 description]
- 2. The [name of political subdivision] agrees to submit the following information to the TCEQ for each of the programs listed above within 30 days of the commencement of this Memorandum in accordance with the terms of this Memorandum:
  - a. Detailed description of the program, including plan for implementation and targeted entities (if applicable);
  - b. Copies of local ordinances or resolutions adopted by [name of political subdivision's decision making body] to implement the program;
  - c. Estimated program success rate for each year through the term of this agreement and supporting documentation;
  - d. Estimated annual energy savings resulting from the program for each year through the term of this agreement and supporting documentation;
- 3. The [name of political subdivision] agrees to submit an annual report on the progress of the implementation of the programs listed in V(A)(1), to the TCEQ. This annual report must include information on program participation rates, program results, and changes to the program. The first report must be submitted to the TCEQ, one year following the commencement of this Memorandum in accordance with the terms of this Memorandum:
- 4. The [name of political subdivision] agrees to report these programs to the State Energy Conservation Office (SECO), as part of the annual reporting requirements required under Section 388.005 of Senate Bill 5 (77th Legislative Session).
  - (B) The TCEQ agrees as follows:

The TCEQ agrees to support this Memorandum as a revision to the SIP and to recommend that the Governor submit it as such to the EPA.

#### VI. Term

The term of this Memorandum shall begin upon signature and approval by all Parties and shall expire on [date of expiration] unless sooner terminated by mutual written consent of both Parties.

#### VII. Miscellaneous

This Memorandum represents the entire agreement between the TCEQ and the [name of political subdivision] and supersedes all other agreements, understandings or commitments, written or oral relative to the subject matter of this Memorandum. This Memorandum may not be amended or modified except pursuant to a mutual written agreement executed by each of the Parties.

This Memorandum shall be governed by and interpreted in accordance with the laws of the State of Texas.

The Parties represent they have authority to enter into this Memorandum, including the authority

granted in the Texas Government Code Chapter 791 Interlocal Cooperation Contracts, and upon approval of the TCEQ Commission, it will be binding on all Parties.

In Witness Whereof, Texas Commission on Environmental Quality and the [name of political subdivision], by their authorized officers, have made and executed this Memorandum in multiple copies, each of which is deemed an original.

Texas Commission on Environmental Quality		
"TCEQ"		
D.		
By:		
Name: Margaret Hoffman	Date	
Title: Executive Director		
[Name of political subdivision]		
Ву:		
Name: [name of designated signer]	Date	
Title: [title of designated signer]		
PASSED AND APPROVED at the regular meeting of t	he Texas Commission on Environmental Quality o	on
TEXAS COMMISSION ON E	ENVIRONMENTAL QUALITY	
For the Commission		

## **Appendix B: Sample Resolution #1**

Source: <a href="http://www.seco.cpa.state.tx.us/sb5draftres.pdf">http://www.seco.cpa.state.tx.us/sb5draftres.pdf</a>

DRAFT
CITY OF, TEXAS
RESOLUTION NO.
A RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF, TEXAS REGARDING THE CITY'S CONSUMPTION OF ELECTRICITY BY CITY FACILITIES
WHEREAS, in 2001 the 77th Texas Legislature adopted Senate Bill 5, An ACT relating to the Texas Emissions Reduction Plan which, among other things, established Chapter 388 of the Texas Health and Safety Code entitled "Texas Building Energy Performance Standards"; and
WHEREAS, Section 388.005 of Chapter 388 requires that a political subdivision, in a nonattainment area or "affected county," shall (i) implement "energy efficiency measures" that meet the standards established for a contract for energy conservation under Section 302.004(b), Texas Local Government Code, in order to reduce electric consumption by the existing facilities of the political subdivision, (ii) establish a goal to reduce electric consumption by its facilities by five (5%) percent each year for five years, beginning January 1, 2002, and (iii) annually report to the State Energy Conservation Office regarding its efforts and progress in connection with reducing its use of electric power; and
WHEREAS, energy efficiency measures and design practices are one way to enhance our environment by improving air quality, reducing pollution and conserving natural resources; and
<b>WHEREAS</b> , the definition for cost-effective is based on the standards established for contract for energy conservation measures under Sections 302.004 (b) Local Government Code in which such measures pay for themselves by comparing the cost of the measure to the savings of the measure.
NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF, TEXAS:
Section 1. <u>Incorporation of Premises</u> . The above and foregoing premises are true and correct and incorporated into and made a part of this Resolution.
Section 2. <u>Reduction of Consumption of Electricity</u> . The City Council does hereby direct the City Manager or designee to implement all cost effective energy efficiency measures; and
Section 3. <u>Reporting; Designation of Contact Person</u> . The City Manager or the City Manager's designee is authorized to make and file such reports in connection herewith as may be required by law.

Section 4. Effective Date. This Resolution shall take effect from and after its date of adoption.

day of,	e City Council of the City of	, Texas this the
ATTEST:		
By: City Secretary	_	
APPROVED AS TO FORM:		
By: City Attorney	_	

#### **Appendix C: Sample Resolution #2**

Source: <a href="http://www.seco.cpa.state.tx.us/sb5draftres2.pdf">http://www.seco.cpa.state.tx.us/sb5draftres2.pdf</a>

DRAFT	
CITY OF, TEXAS	
RESOLUTION NO.	-
A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF	, TEX
A GOAL AS SET FORTH IN AND IN ACCORDANCE WITH SEI	NATE BILL

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF \_\_\_\_\_\_\_, TEXAS ADOPTING A GOAL AS SET FORTH IN AND IN ACCORDANCE WITH SENATE BILL 5 (SECTION 388.005, TEXAS HEALTH AND SAFETY CODE) REGARDING THE CITY'S CONSUMPTION OF ELECTRICITY BY CITY FACILITIES; [option to include] DIRECTING THE PREPARATION OF AN ENERGY EFFICIENCY PLAN; PROVIDING FOR THE REPORTING TO THE STATE ENERGY CONSERVATION OFFICE

**WHEREAS**, in 2001 the 77th Texas Legislature adopted Senate Bill 5, An ACT relating to the Texas Emissions Reduction Plan which, among other things, established Chapter 388 of the Texas Health and Safety Code entitled "Texas Building Energy Performance Standards"; and

WHEREAS, Section 388.005 of Chapter 388 requires that a political subdivision, in a nonattainment area or "affected county," shall (i) implement "energy efficiency measures" that meet the standards established for a contract for energy conservation under Section 302.004(b), Texas Local Government Code, in order to reduce electric consumption by the existing facilities of the political subdivision, (ii) establish a goal to reduce electric consumption by its facilities by five (5%) percent each year for five years, beginning January 1, 2002, and (iii) annually report to the State Energy Conservation Office (SECO) regarding its efforts and progress in connection with reducing its use of electric power; and

WHEREAS, SECO, charged by Section 388.005 to "provide assistance and information to political subdivisions to help the political subdivisions meet" their goals, has (i) determined that the goal of reducing electric consumption by five (5%) percent each year for five (5) years is to be measured against the baseline year of 2001, and (ii) interpreted the term "facilities" to include any facility (including street, stadium lighting, water pumping and treatment facilities) that has an "active electric account" on September 1, 2001, and (iii) determined that the requirement of implementing all the energy efficiency measures that are "cost effective" means the cost of the energy efficiency project is less than the utility savings realized by the project; and

**WHEREAS**, the City Council desires by the adoption of this Resolution to, among other things, implement all cost effective energy efficiency measures in existing buildings and adopt for the City the goal reducing the City's electric consumption by five (5%) percent each year for five years (beginning with calendar year 2002); and

**WHEREAS**, the definition for cost-effective is based on the standards established for contract for energy conservation measures under Sections 302.004 (b) Local Government Code in which such measures pay for themselves by comparing the cost of the measure to the savings of the measure.

## NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF , TEXAS:

Section 1. <u>Incorporation of Premises</u>. The above and foregoing premises are true and correct and incorporated into and made a part of this Resolution.

Section 2. <u>Reduction of Consumption of Electricity</u>. The City Council does hereby direct the City Manager or designee to implement all cost effective energy efficiency measures; and reduce the City's annual consumption of electricity by the facilities (as defined herein) of the City by five (5%) percent for each of five successive calendar years, beginning January 1, 2002 (calendar year 2002).

- A. The determination of whether or not the herein stated goal for each calendar year has been met by the City shall be made by comparing (i) the consumption of kilowatt hours by the facilities of the City for the calendar year in question (beginning with calendar year 2002) with (ii) the consumption of electricity by such facilities for calendar year 2001. As soon as reasonably practical following the end of each calendar year in question (beginning with calendar year 2002 and for each of the four (4) successive years), the City Manager (or the Manager's designee) shall make such comparison and report the results of the comparison to the City Council and, as may be required, to SECO or its successor and to other government agencies.
- B. For purposes of the comparison, the term "facilities" includes any facility of the City (including without limitation street and stadium lighting). Any new, modified or expanded City facilities (including without limitation, any buildings, street lighting, or any other improvements of the City) constructed, placed, or otherwise added by the City after September 1, 2001 are not "facilities" subject to the annual SECO report.

Section 3. <u>Electricity Efficiency Plan</u>. The City Manager is hereby directed to develop and to present to the City Council for its consideration an energy efficiency plan, that includes as its stated goal the goal set forth in Section above for the City's facilities, existing, new or proposed. Building operations, purchasing specifications and methods to identify, implement and finance energy efficiency measures shall be specifically included in the plan.

Section 4. <u>Reporting</u>; <u>Designation of Contact Person</u>. The City Manager, or the City Manager's designee is authorized to make and file such reports in connection herewith as may be required by law.

Section 5. Effective Date. This Resolution shall take effect from and after its date of adoption.

	PASSED AND APPROVED by the City Council of the City of, Texas thi	s the
day of	··	
	Mayor	

ATTEST:

By:
City Secretary
APPROVED AS TO FORM:
By:
City Attorney

## **Appendix D: Sample Ordinance**

This sample ordinance is aimed at cities interested in adopted locally-mandated "Green" Building Energy Codes (Beyond State Minimum).

DRAFT
CITY OF, TEXAS
ORDINANCE NO
AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF
WHEREAS, the City Council of the City of, Texas ("City Council") has investigated and determined that it would be advantageous and beneficial to the citizens of the City of, Texas ("City") to create the Green Building Program.
Section 1: <u>Findings Incorporated</u> . The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.
Section 2: <u>Green Building Program</u> . The Green Building Program sets the minimum standards for energy efficiency for all single-family residential buildings platted after May 23, 2001 ("Minimum Standards"). The Minimum Standards for energy efficiency of single-family residential buildings and structures shall be the Environmental Protection Agency's Energy StarTM designation as it currently stands or may be amended

Section 3: <u>Saving/Repealing Clause</u>. Ordinances or parts thereof in force at the time this Ordinance shall take effect and inconsistent herewith are hereby repealed to the extent that they are inconsistent with the Ordinance; but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall the repeal prevent a prosecution from being commenced from any violation if occurring prior to the repeal of the ordinance. Any remaining portion of conflicting

ordinances shall remain in full force and effect.

Section 4: <u>Penalty Provision</u>. Any person, firm, corporation or business entity violating this Ordinance shall be deemed guilty of a misdemeanor, and upon conviction therefor, shall be fined a sun not exceeding Five Hundred Dollars (\$500.00), and each and every day that such a violation continues shall be considered a separate offense; provided, however, that such a penal provision shall not preclude a suit to enjoin such violation. The City retains all legal rights and remedies available pursuant to local, state, and federal law.

Section 5: <u>Severability</u>. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason, held to be unconstitutional or invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City hereby declares that it would have passed this Ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, clauses, and phrases be declared unconstitutional.

Section 6: <u>Effective Date</u>. The caption of this Ordinance shall be published in accordance with the City Charter, and shall be effective immediately upon its passage and such publication.

PASSED AND APPROVED by the	e City Council of the City of	, Texas this the
day of		
	Mayor	
ATTEST:		
By:	-	
City Secretary		
APPROVED AS TO FORM:		
Ву:	_	
City Attorney		

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